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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,418	09/25/2003	Jaroslav Sranka	150-129	5062

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EXAMINER

MILLS, DANIEL J

ART UNIT PAPER NUMBER

3679

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,418	<b>Applicant(s)</b> SRANKA, JAROSLAV	
	<b>Examiner</b> Daniel J. Mills	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22, 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22 and 24-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Objections***

#### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," "the invention discloses," etc. "The invention discloses" line 1; "is disclosed" line 1 must be deleted.

### ***Drawings***

The drawings are objected to because of improper crosshatching (at least 6); some items that should be crosshatched are not (at least 1 and 2); the entirety of Figure 1 is unclear as to what is represented in cross-section and what is not cross-section A indicates that the object is sectioned through its center. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

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description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 24-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bennett (US 2,641,629).

Regarding claim 22, Bennett discloses a swivel comprising, two coaxial, mutually rotatable members (22, 23) and having a plurality of means (19) for transferring operating and/or controlling media between the rotatable members, wherein said means are flexible, elastically extensible (an inherent property of wire) hoses or cables between the members.

Regarding claim 24, Bennett discloses a swivel wherein flexible hoses or cables are spiral hoses or cables (as shown in Figure 4).

Regarding claim 25, Bennett discloses a swivel wherein the hoses or cables are connected to the rotatable members by means of quick-couplings (easily operable holes 24)

Regarding claim 26, Bennett discloses a swivel wherein a cylindrical housing for enclosing the flexible hoses or cables between the two members is provided.

Regarding claim 27, Bennett discloses a swivel wherein one of the rotatable members is a lower connection ring (23) and the other rotatable member is a cover (22), the cover being connected to a central shaft (4), in relation to which the lower connection ring is journaled.

Regarding claim 28, Bennett discloses a swivel wherein the cover is connected to the central shaft by means of a quick-coupling (the element fixing 22 to the shaft as shown in Figure 3).

Regarding claim 29, Bennett discloses a swivel wherein the lower connection ring and the cover are each provided with a plurality of through connection holes

Regarding claim 30, Bennett discloses a swivel wherein the central shaft is arranged on a base plate (the end surface of 22).

Regarding claim 31, Bennett discloses a swivel wherein the mutual rotation between the two rotatable members is limited to no more than one full revolution.

Regarding claim 32, Bennett discloses a swivel wherein said flexible hoses or cables are connected generally axially to the central shaft when the rotatable members are in a non-rotated position.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 24, 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtot (US 3,026,129) in view of Zeigler (US 6,094,922).

Regarding claim 22, Courtot discloses a swivel comprising, two coaxial, mutually rotatable members (5, 10) and having means (8) for transferring operating and/or controlling media between the rotatable members, wherein said means are flexible, elastically extensible hoses or cables (8) between the members.

Courtot fails to disclose a plurality of means for transferring media.

Ziegler teaches the use of a plurality of means (22, 24) for transferring media within a flexible hose (32) for the purpose of thermally isolating the media flowing within the means from the ambient environment. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the arrangement of Courtot to use a plurality of means (22, 24) for transferring media within a flexible hose (32) as taught by Ziegler, for the purpose of thermally isolating the media flowing within the means from the ambient environment

Regarding claim 24, Courtot in view of Ziegler results in a swivel wherein flexible hoses or cables (8) are spiral hoses or cables.

Regarding claim 26, Courtot in view of Ziegler results in a swivel wherein a cylindrical housing (formed by the union of the cylindrical sidewalls of 5 and 10) for enclosing the flexible hoses or cables between the two members is provided.

Regarding claim 27, Courtot in view of Ziegler results in a swivel wherein one of the rotatable members is a lower connection ring (10) and the other member is a cover (5), the cover being connected to a central shaft (14), in relation to which the lower connection ring is journaled (the shaft acts as a journal surface on which 10 rides).

Regarding claim 28, Courtot in view of Ziegler results in a swivel wherein the cover (5) is connected to the central shaft (14) by means of a quick-coupling (16).

Regarding claim 29, Courtot in view of Ziegler results in a swivel wherein the lower connection ring (10) and the cover (5) are provided with a plurality of through connection holes (through which the shaft passes and through which hose ends-6 pass).

Regarding claim 30, Courtot in view of Ziegler results in a swivel wherein the central shaft (14) is arranged on a base plate (the end surface of 10).

Regarding claim 31, Courtot in view of Ziegler results in a swivel wherein the mutual rotation between the two members is limited to no more than one full revolution (paragraph 2 lines 30-35).

Regarding claim 32, Courtot in view of Ziegler results in a swivel wherein said flexible hoses or cables are connected generally axially to the central shaft when the rotatable members are in a non-rotated position.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courtot and Ziegler as set forth above, and further in view of Sarson (US 4,193,616).

Regarding claim 25, Courtot in view of Ziegler results in a swivel wherein the hoses or cables (8) are connected to the members (5, 10). Courtot fails to disclose the use of a quick connect coupling to connect the hose to the members.

Sarson teaches the use of a quick connect coupling on a tube end, for the purpose of improving the initial assembly and reducing costs. Accordingly it would have been obvious to one of ordinary skill in the swivel joint art at the time of applicant's invention to modify the arrangement of Courtot to include a quick connect fitting such as that taught by Sarson to improve the initial assembly of the swivel and reduce its cost.

### ***Response to Arguments***

Applicant's arguments filed 6/21/2006 have been fully considered but they are not persuasive.

Applicant argues that Bennett fails to disclose that the electric cables are elastically extensible. This is not persuasive, as something that is inherent does not need to be specifically stated in the disclosure. Examiner is of the opinion that applicant has not defined "elastically extensible" in either the claims or specification in such a way as to be able to read this limitation in anything other than its broadest sense. With this in mind, nearly everything is elastically extensible, even if only on a microscopic scale. Certainly ANY material (copper or aluminum for example) usable as wiring is elastically extensible. Had applicant originally disclosed that "elastically extensible" was to be read



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to mean capable of 150% elongation or something to that effect, applicant might have some basis for an argument of the type currently under consideration. That the invention of Bennett is drawn to a control wheel for an airplane yet still anticipates all of applicants limitations shows demonstrates the fact that what applicant is attempting to claim is far from patentable. Certainly the swivel disclosed by Bennett is capable of use in an industrial robot. If applicant were to positively claim an industrial robot, it is likely Bennett would no longer anticipate such a claim. Additionally, applicant argues that Bennett fails to disclose that the wires are "spiral", however, Bennett clearly shows the wires formed in a "spiral" in Figure 4.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ziegler teaches the use of a plurality of means for transferring media within a flexible hose for the

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purpose of thermally isolating the media flowing within the means from the ambient environment (Column 1 lines 10-15; column 3 lines 45-55).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Mills whose telephone number is 571-272-8115. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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10/29/2006